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**SEEDLINGS AND SAPLINGS INVENTORY OF TOK BALI, KELANTAN AND
KEMAMAN, TERENGGANU MANGROVE COMMUNITIES**

**By
Freedey Mosulin**

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the requirements for the degree of
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**Department of Biological Sciences
Faculty of Science and Technology
KOLEJ UNIVERSITI SAINS DAN TEKNOLOGI MALAYSIA
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**JABATAN SAINS BIOLOGI
FAKULTI SAINS DAN TEKNOLOGI
KOLEJ UNIVERSITI SAINS DAN TEKNOLOGI MALAYSIA**

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Adalah ini diakui dan disahkan bahawa laporan penyelidikan bertajuk: SEEDLINGS AND SAPLINGS INVENTORY OF TOK BALI, KELANTAN AND KEMAMAN, TERENGGANU MANGROVE COMMUNITIES oleh Freeday Mosulin no. matrik: UK 9107 telah diperiksa dan semua pembetulan yang disarankan telah dilakukan. Laporan ini dikemukakan kepada Jabatan Sains Biologi sebagai memenuhi sebahagian daripada keperluan Ijazah Sarjana Muda Sains Gunaan Pemuliharaan dan Pengurusan Biodiversiti, Fakulti Sains dan Teknologi, Kolej Universiti Sains dan Teknologi Malaysia.

Disahkan oleh:

Penyelia utama
Nama: **JAMILAH MOHD SALIM @ HALIM**
Pensyarah
Jabatan Sains Biologi
Fakulti Sains dan Teknologi
Kolej Universiti Sains dan Teknologi Malaysia
Cop Rasmi: (KUSTEM)
21030 Kuala Terengganu, Terengganu.

Tarikh: 4/5/6

Ketua Jabatan Sains Biologi
Nama: **PROF. MADYA DR. NAKISAH BT. MAT AMIN**
Ketua
Jabatan Sains Biologi
Fakulti Sains dan Teknologi
Kolej Universiti Sains dan Teknologi Malaysia
Cop Rasmi: (KUSTEM)
21030 Kuala Terengganu.

Tarikh: 4/05/06

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ABSTRACT

A study was conducted to determine seedlings and saplings composition and distribution in stands of Tok Bali, Kelantan and Kemaman, Terengganu. In total, 42 plots of 1 m × 1 m were established in both study sites. DBH (saplings) and height (seedlings) data were obtained and analyzed. Overall, *Sonneratia alba* had the highest number of seedlings and saplings in Tok Bali mangrove stand of 137 individuals, followed by *Avicennia alba* and *Ceriops decandra*, with 112 and 8 individuals respectively. Meanwhile, *Rhizophora apiculata* was the most abundant seedlings and saplings in Kemaman study site, with 122 individuals, followed by *Kandelia kandel* (19 individuals) and *Bruguiera cylindrica* (eight individuals). Other species of seedlings and saplings were *Sonneratia alba*, *Bruguiera gymnorrhiza*, *Sonneratia caseolaris*, *Ceriops decandra* and *Nypa fruticans* with less than 10 individuals. Possible regeneration potential at both study sites is compared and discussed.

**Inventori Anak Benih dan Anak Pokok Bakau
Komuniti Hutan Paya Laut di Tok Bali, Kelantan dan Kemaman, Terengganu**

ABSTRAK

Kajian ini dijalankan bagi menentukan komposisi spesies serta taburan bagi anak benih dan anak pokok bakau yang terdapat pada komuniti hutan paya laut di daerah Tok Bali, Kelantan dan Kemaman, Terengganu. Sebanyak 42 plot berukuran 1 m × 1 m telah dibina di kedua-dua kawasan kajian. Data-data seperti DBH (anak pokok bakau) dan tinggi pokok (benih dan anak pokok bakau), telah diambil dan dianalisis. Secara keseluruhannya, spesies *Sonneratia alba* merupakan anak benih dan anak pokok yang mempunyai bilangan individu tertinggi di kawasan kajian Tok Bali iaitu sebanyak 137 individu, diikuti spesies *Avicennia alba* dan *Ceriops decandra*, iaitu masing-masing mencatat sebanyak 112 dan 8 individu. Sementara itu, spesies *Rhizophora apiculata* merupakan anak benih dan anak pokok bakau yang terdapat paling banyak di kawasan kajian Kemaman iaitu sebanyak 122, diikuti spesies *Kandelia kandel* (19 individu) dan *Bruguiera cylindrica* (lapan individu). Manakala spesies-spesies anak benih dan anak pokok bakau yang lain adalah *Sonneratia alba*, *Bruguiera gymnorrhiza*, *Sonneratia caseolaris*, *Ceriops decandra* and *Nypa fruticans*; kesemuanya mencatat bilangan individu yang rendah iaitu kurang daripada 10. Potensi untuk proses regenerasi bagi kedua-dua kawasan kajian telah dibuat perbandingan dan dibincangkan.